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APPLICATION N	0. 1	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/450,308		11/29/1999	STUART C. MAUDLIN	21632-P001US	7438
28277	7590	07/14/2004		EXAM	INER
	AD SECH	REST & MINICK I	REAGAN, JAMES A		
910 TRAVIS STREET				ART UNIT	PAPER NUMBER
HOUSTON, TX 77002				3621	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/450,308	MAUDLIN, STUART C.
Office Action Summary	Examiner	Art Unit \ \ \ \ \
	James A. Reagan	3621
The MAILING DATE of this communication appeared for Reply	ppears on the cover sheet wi	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however, may a re ply within the statutory minimum of thirty d will apply and will expire SIX (6) MON	eply be timely filed  y (30) days will be considered timely. THS from the mailing date of this communication.
Status		
1) Responsive to communication(s) filed on 12	Mav 2004	
_	is action is non-final.	
3) Since this application is in condition for allow	ance except for formal matte	ers, prosecution as to the merits is
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	. 11, 453 O.G. 213.
Disposition of Claims		
4) ☐ Claim(s) 1,2,4,5,8,10,12,13,16,19,20,23,25,2 4a) Of the above claim(s) is/are withdrest is/are allowed.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1, 2, 4, 5, 8, 10, 12, 13, 16, 19, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20	awn from consideration. 23, 25, 27, 28, 31, and 33-38	
Application Papers	or steered requirement.	
9)☐ The specification is objected to by the Examir	ier.	
10)☐ The drawing(s) filed on is/are: a)☐ ac		
Applicant may not request that any objection to the		
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	ction is required if the drawing(s Examiner, Note the attached	s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119	and the discondi	Office Action of form F 10-132.
12)☐ Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. &	119(a)-(d) or (f)
a) ☐ All b) ☐ Some * c) ☐ None of:	promy ander 66 6.6.6. 3	110(4)-(4) 01 (1).
1.☐ Certified copies of the priority documer		
<ul><li>2. ☐ Certified copies of the priority documer</li><li>3. ☐ Copies of the certified copies of the priority</li></ul>	nts have been received in Ap	oplication No
3. Copies of the certified copies of the pricapplication from the International Burea	onty documents have been r au (PCT Rule 17 2(a))	eceived in this National Stage
* See the attached detailed Office action for a lis		eceived.
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Amarka, and A		
Attachment(s)  1)	4) 🔲 Interview Su	immory (PTO 442)
2) Dotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s).	/Mail Date
B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	) 5)  Notice of Inf. 6)  Other:	ormal Patent Application (PTO-152) 
6. Patent and Trademark Office		

09/450,308 Art Unit: 3621

## **DETAILED ACTION**

## Status of Claims

- 1. This action is in response to the restriction requirement and subsequent election received on 12 May 2004.
- 2. Group I (claims 1, 2, 4, 5, 8, 10, 12, 13, 16, 19, 20, 23, 25, 27, 28, 31, and 33-38) have been elected.
- 3. Groups II and III (claims 3, 6, 7, 9, 11, 14, 15, 17, 18, 21, 22, 24, 26, 29, 30, 32, and 39-44) have been cancelled.
- 4. Claims 1, 2, 4, 5, 8, 10, 12, 13, 16, 19, 20, 23, 25, 27, 28, 31, and 33-38 have been examined.

# Allowable Subject Matter

5. Claims 10, 12, 13, 16, 25, 27, 28, 31, 34, and 37 would be allowable if rewritten to overcome the rejections under 35 USC § 101.

# **Affidavit Submission By Applicant**

6. The affidavit (Natural Gas Week, volume 14, number 49, December 7, 1998) filed on 24 February 2004 under 37 CFR 1.131 has been considered but is ineffective to overcome the Ausubel (US 6,026,383) reference.

The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Ausubel (US 6,026,383) reference. Although the exhibit discusses an auction concept, there is not evidence that the Applicant's concept was reduced to practiced on or about the claimed date of conception. Moreover, the gaps in time between the exhibits provided to date do not demonstrate due diligence in developing the invention as claimed. In addition, although the exhibit discloses Vickery/Dutch auction techniques, apparently already old and well-known in the financial community and academia, the exhibit also shows no evidence that the Applicant's concept was reduced to practiced on or about the claimed date of conception.

# **RESPONSE TO ARGUMENTS**

7. Applicant's arguments received on 08 July 2003 have been fully considered but they are not persuasive. Referring to the previous Office action, Examiner has cited relevant portions of the references as a means to illustrate the systems as taught by the prior art. As a means of

providing further clarification as to what is taught by the references used in the first Office action, Examiner has expanded the teachings for comprehensibility while maintaining the same grounds of rejection of the claims, except as noted above in the section labeled "Status of Claims." This information is intended to assist in illuminating the teachings of the references while providing evidence that establishes further support for the rejections of the claims.

As discussed above Applicant's affidavit presented on 24 February 2004 does not overcome the Ausubel (US 6,026,383) reference.

# Claim Rejections - 35 USC § 101

- 8. 35 U.S.C. 101 reads as follows:
  - Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requires of this title.
- 9. Claims 1, 2, 4, 5, 8, 10, 12, 13, 16, 19, 20, 23, 25, 27, 28, 31, and 33-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to nonstatutory subject matter. The basis of this rejection is set forth in a two-prong test of:
  - (1) whether the invention is within the technological arts; and
  - (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, the recited steps of merely calculating, withholding, sorting, processing, selecting, announcing, collecting, rejecting, and iteratively performing calculations prior to a determining step does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed without the use of any technological apparatus, system or method such as, for example, a computer system, database, electronic circuit, or software application. These steps only constitute a method that is easily attainable without the use of any state-of-the-art devices or techniques.

# Claim Rejections - 35 USC § 103

**10.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1, 2, 4, 5, 8, 19, 20, 23, 33, 35, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausubel et al (Vickrey Auctions with Reserve Pricing, June 28, 1999) in view of Ausubel (US Patent No. 6,026,383, herein referred to as Ausubel '383), further in view of Dutch Auction Glossary (1997-1999 Cyberinvest.Com).

### Claim 1:

Ausubel et al. shows a method of optimizing a Vickrey auction transaction to maximize revenue and profit to the seller, by withholding supply based on a market-derived reserve price calculated from buyer's bids (page 1, paragraph 1). Ausubel '383 provides supporting evidence. Ausubel '383 discloses that the intent of the method is to maximize revenue and profit (column 2, lines 23-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the Vickrey-type auction techniques to maximize profit and revenue because that is the goal of any rational business strategy.

In addition, based on the testimony by the Applicant in the affidavit filed on 31 October 2002 (paper #7) Exhibit B, the Examiner recognizes that techniques of the Dutch auction are known to be the same as the Vickrey auction. Dutch Auction Glossary (1997-1999 Cyberinvest.Com) is hereby incorporated as supporting evidence.

# Claim 2:

المُنْ اللَّهُ الْمُعْلِينَ فَيْ الْمُعْلِينَا لَهُ اللَّهِ اللَّهِ اللَّهُ اللَّهُ اللَّهُ اللَّهُ المعالمة ا

Ausubel et al. demonstrates the economic theory of Vickery auctions with reserve pricing, including recording auction parameters and

calculating an optimum selling price; announcing the auction and collecting bids; sorting receiving bids; processing bids to determine the optimum selling price; selecting the winning bids (Ausubel, page 5, section 3, and Ausubel '383, column 1, line 54.). However, because Ausubel et al. is a theoretical research paper it does not show a physical system for carrying out a Vickrey auction with reserve pricing. Examples of on-line, automated auctions are prevalent in the art as noted by the applicant (page 6, line 14). The Ausubel '383 patent shows, in figures 1-4 and related text) the steps of: establishing a system for recording auction parameters and calculating a selling price and a communications network for announcing the auction and collecting bids (column 2, lines 61-67); sorting receiving bids (column 9, lines 57-59); processing bids to determine the selling price (Fig. 2b and related text); selecting the winning bids and notifying bidders of whether they won or lost based upon the calculated optimum selling price (column 7, lines 15-17). It would have been obvious to one of skill in the art at the time of the invention to use the automated auction system of '383 to implement the theoretical auction of Ausubel et al. because the automated auction system allows the auction to be conducted swiftly even if the bidders are not located on-site ('383, column 3, lines 33-35).

# Claim 4:

The Ausubel '383 patent shows, in figures 1-4 and related text, announcing the selected auction parameters (column 6, lines 15-27;

collecting and recording bids containing (column 6, lines 63-65): the identity of the bidder (column 6, lines 63-65); quantity bid for (column 7, line 1) pricing information (column 6, line 63); and whether bidder will accept partial quantity, according to the procedures selected and announced (column 8, lines 5-7); rejecting nonconforming bids and noting any bid withdrawals (column 7, lines 8-12).

With regard to the limitations of whether a bidder will accept a partial quantity and rejecting nonconforming bids, the Examiner takes Official Notice that it is old and well-known in the equity markets trading arts to provide partial fill orders when the quantity available is less than the bid quantity. In addition, the Examiner takes Official Notice that rejection of non-conforming bids is also old and well-known in the equity markets trading arts, such as when a bidder does not have enough money to cover a winning bid, or the facilities to house and store the commodity when the auction has completed.

#### Claim 5:

The Ausubel '383 patent shows, in figures 1-4 and related text, the step of sorting and consolidating all at market bids and all price bids other than those less than the reserve price, wherein the price bids are ranked in descending order (column 9, lines 57-59).

# Claim 8:

The Ausubel '383 patent shows, in figures 1-4 and related text, the step of sorting and consolidating all at market bids and all price bids other

than those less than the reserve price, wherein the price bids are ranked in descending order (column 9, lines 57-59).

# Claim 19:

Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).

### Claim 20:

Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).

## Claim 23:

Ausubel et al. shows the further step of determining if the auction results are to optimized for seller profit rather than revenue, and if so, the step of determining a cost function to be included in subsequent calculations (section 3, page 5).

### Claim 33:

The Ausubel '383 patent shows, in figures 1-4 and related text, the step of comparing the total number of items available to that required to supply all bidders that bid at or above the optimum selling price to determine if there are additional items available for sale, and if so processing bids made at market (column 9, lines 37-48).

## Claim 35:

The Ausubel '383 patent shows, in figures 1-4 and related text, the step of comparing the total number of items available to that required to supply all bidders that bid at or above the optimum selling price to determine if there are additional items available for sale, and if so processing bids made at market (column 9, lines 37-48).

# Claim 36:

The Ausubel '383 patent shows, in figures 1-4 and related text, the step of processing at market bids to determine if there are sufficient items available to supply all the at market demand, and if not, further comprising the step of applying the selected prorationing scheme (column 7, lines 40-46).

#### Claim 38:

The Ausubel '383 patent shows, in figures 1-4 and related text, the step of processing at market bids to determine if there are sufficient items available to supply all the at market demand, and if not, further comprising the step of applying the selected prorationing scheme (column 7, lines 40-46).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **James A**. **Reagan** whose telephone number is **(703) 306-9131**. The examiner can normally be reached on Monday-Friday, 9:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **James Trammell** can be reached at (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is **(703) 305-3900**.

Any response to this action should be mailed to:

## Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-7687 [Official communications; including

After Final communications labeled "Box AF"]

(703) 308-1396 [Informal/Draft communications, labeled

"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7<sup>th</sup> floor receptionist.

**JAR** 

09 July 2004